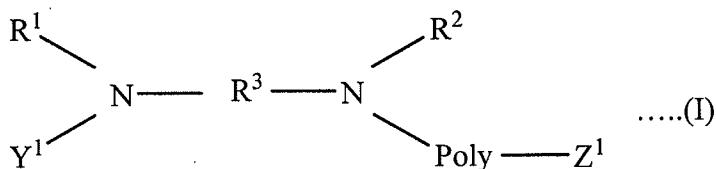


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A modified conjugated diene polymer comprising a homopolymer of a conjugated diene compound or a copolymer of a conjugated diene compound and an aromatic vinyl compound and characterized by the following formula (I):



(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20, a substituted silyl group or a hydrogen atom; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom unless provided that it does not have an active proton; Y¹ is a substituted silyl group or a hydrogen atom; a part of R¹, R², R³ and Y¹ may be bonded to each other to form a cyclic structure; Poly is a homopolymer part of a conjugated diene compound or a copolymer portion of a conjugated diene compound and an aromatic vinyl compound; Z¹ is an alkali metal, an alkaline earth metal salt or an alkaline earth metal alkyl group, or a residue produced by reacting with a carbanion reactive compound, or a hydrogen atom provided that when Z¹ is an alkali metal, an alkali earth metal salt or an alkaline earth metal alkyl group, none of R¹, R² and Y¹ is the hydrogen atom).

2. (original) A modified conjugated diene polymer according to claim 1, wherein R² in the formula (I) is an alkyl or aryl group having a carbon number of 1-20.

3. (original) A modified conjugated diene polymer according to claim 1, wherein the conjugated diene compound is 1,3-butadiene or isoprene.

4. (original) A modified conjugated diene polymer according to claim 1, wherein the aromatic vinyl compound is styrene.

5. (original) A modified conjugated diene polymer according to claim 1, wherein said polymer is a copolymer of the conjugated diene compound and the aromatic vinyl compound.

6. (previously presented): A modified conjugated diene polymer according to claim 1, wherein said polymer has a Mooney viscosity ML₁₊₄ (100°C) of 10-150.

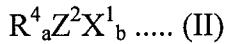
7. (previously presented): A modified conjugated diene polymer according to claim 1, wherein said polymer is a modified conjugated diene polymer obtained by modifying a modified conjugated diene polymer wherein Z¹ in the formula (I) is an alkali metal, an alkaline earth metal salt or an alkaline earth metal alkyl group with a carbanion reactive compound, in which Z¹ in the formula (I) is a residue produced by reacting with the carbanion reactive compound.

8. (previously presented): A modified conjugated diene polymer according to claim 7, wherein the carbanion reactive compound used in the modification is a compound including at

least one of C=X (X is O, S or C) and an epoxy group as a carbanion reaction site and a nitrogen-containing functional group, a silicon-containing compound, or a tin-containing compound.

9. (previously presented): A modified conjugated diene polymer according to claim 8, wherein the carbanion reactive compound used in the modification is at least one selected from the group consisting of 4-dimethylamino benzophenone, 4-diethylamino benzophenone, 4,4'-bis(dimethylamino) benzophenone, 4,4'-bis(diethylamino) benzophenone, 4-dimethylamino benzaldehyde, 4-diethylamino benzaldehyde, 1,1-bis(4-dimethylaminophenyl) ethylene, 1,1-bis(4-diethylaminophenyl) ethylene, 1,1-dimethoxy trimethylamine, 4-dimethylaminobenzylidene aniline, N,N-dimethylformamide, N,N-diethylformamide, N,N-dimethylacetamide, N,N-diethylacetamide, 4-pyridylamide, 4-pyridyl-ethyleneoxide, 4-vinylpyridine, 2-vinylpyridine, dicyclohexyl carbodiimide, ϵ -caprolactam, N-methyl- ϵ -caprolactam, 1,3-dimethyl-2-imidazolidinone, N-methylpyrrolidone, phenylisocyanate, phenylthioisocyanate and diisocyanate diphenylmethane.

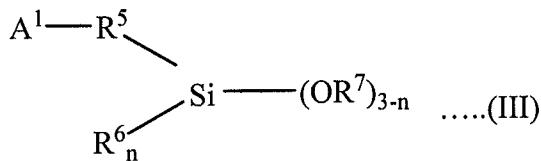
10. (original) A modified conjugated diene polymer according to claim 8, wherein the carbanion reactive compound used in the modification is a coupling agent represented by the following formula (II):



(wherein R^4 is independently selected from an alkyl group having a carbon number of 1-20, a cycloalkyl group having a carbon number of 3-20, an aryl group having a carbon number of 6-20 and an aralkyl group having a carbon number of 7-20; Z^2 is tin or silicon atom; X^1 is

independently chlorine or bromine atom; and a is an integer of 0-3 and b is an integer of 1-4 provided that a+b = 4).

11. (previously presented): A modified conjugated diene polymer according to claim 8, wherein the carbanion reactive compound used in the modification is at least one selected from the group consisting of a hydrocarbyloxysilane compound represented by the following formula (III):



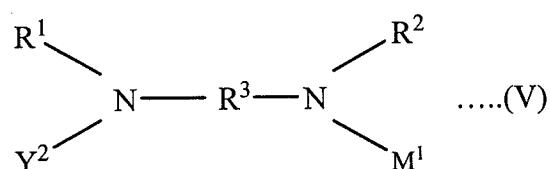
[wherein A¹ is a monovalent group having at least one functional group selected from (thio)epoxy, (thio)isocyanate, (thio)ketone, (thio)aldehyde, imine, amide, isocyanuric acid triester, (thio)carboxylic acid hydrocarbylester, a metal salt of (thio)carboxylic acid, carboxylic anhydride, a halide of carboxylic acid, carbonic acid dihydrocarbylester, cyclic tertiary amine, non-cyclic tertiary amine, nitrile, pyridine, sulfide, multi-sulfide, an alkali metal salt of amine, an alkaline earth metal salt of amine, silazane and disilazane; R⁵ is a single bond or a divalent inactive hydrocarbon group; R⁶ and R⁷ are independently a monovalent aliphatic hydrocarbon group having a carbon number of 1-20 or a monovalent aromatic hydrocarbon group having a carbon number of 6-18; n is an integer of 0-2; when plural OR⁷'s are existent, these OR⁷'s may be same or different; active proton and onium salt is not included in the molecule] and/or a partial condensate thereof, and a hydrocarbyloxysilane compound represented by the following formula (IV):

$$R^8_p\text{-Si-(OR}^9\text{)}_{4-p} \dots \text{ (IV)}$$

(wherein R⁸ and R⁹ are independently a monovalent aliphatic hydrocarbon group having a carbon number of 1-20 or a monovalent aromatic hydrocarbon group having a carbon number of 6-18; p is an integer of 0-2; when plural OR⁹'s are existent, these OR⁹'s may be same or different; active proton and onium salt is not included in the molecule) and/or a partial condensate thereof.

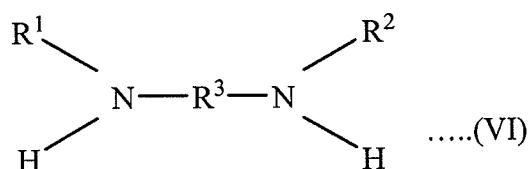
12. (previously presented): A modified conjugated diene polymer according to Claim 1, characterized by the further modification of a modified conjugated diene polymer wherein Y^1 in the formula (I) is a hydrogen atom with at least one of a compound having an isocyanate group and a condensate thereof.

13. (currently amended): A polymerization initiator characterized by the following formula (V):



(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that~~unless~~ it has does not have an active proton; Y² is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure; M¹ is an alkali metal, or an alkaline earth metal salt or an alkaline earth metal alkyl group).

14. (currently amended): A polymerization initiator solution resulting from the addition of a diamine compound represented by the following formula (VI):

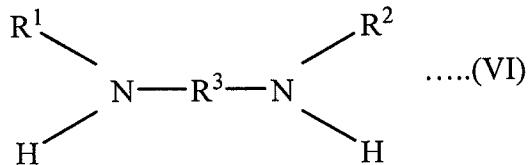


(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a hydrogen atom; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom unless provided that it has does not have an active proton; a part of R¹, R² and R³ may be bonded to each other to form a cyclic structure) with a silyl compound represented by the following formula (VII):

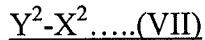


(wherein Y² is a substituted silyl group; X² is one selected from the group consisting of a halogen atom, a thioalkyl group having a carbon number of 1-20, cyano group and trifluoromethylsulfonyl group) and the subsequent addition of an organic alkali metal compound or an organic alkaline earth metal compound thereto.

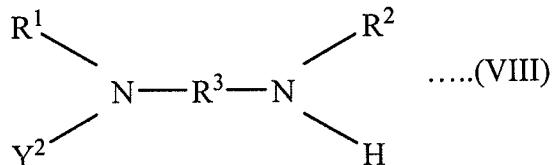
15. (currently amended): A method of producing a polymerization initiator, characterized in that (i) a diamine compound ~~represented by the following~~ formula (VI):



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a hydrogen atom; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it does not have an active proton; a part of R^1 , R^2 and R^3 may be bonded to each other to form a cyclic structure) is added with a silyl compound ~~represented by the following~~ formula (VII):



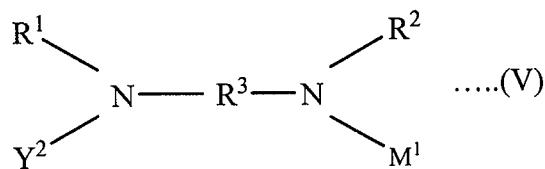
(wherein Y^2 is a substituted silyl group; X^2 is one selected from the group consisting of a halogen atom, a thioalkyl group having a carbon number of 1-20, cyano group and trifluoromethylsulfonyl group) to form a silylated diamine compound represented by the following formula (VIII):



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom ~~unless provided that~~ it has does not have an active

proton; Y² is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure); and

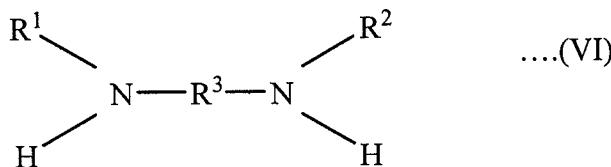
(ii) the said silylated diamine compound is added with an organic alkali metal compound or an organic alkaline earth metal compound to form a polymerization initiator ~~or represented by~~ the following formula (V)



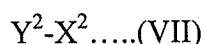
(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it has does not have an active proton; Y² is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure; M¹ is an alkali metal, an alkaline earth metal salt or an alkaline earth metal alkyl group).

16. (original) A method of producing a polymerization initiator according to claim 15, wherein X² in the formula (VII) is a halogen atom.

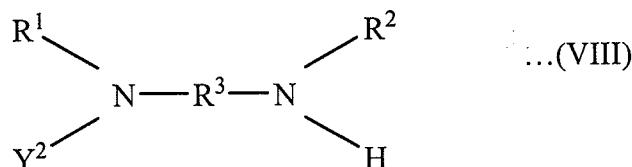
17. (currently amended): A method of producing a modified conjugated diene polymer, characterized in that (i) ~~the~~ diamine compound represented by of the formula (VI):



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a hydrogen atom; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hereto atom provided that it does not have an active proton; a part of R^1 , R^2 and R^3 may be bonded to each other to form a cyclic structure) is added with ~~the~~ a silyl compound represented by the following formula (VII):



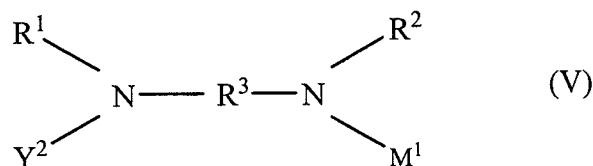
(wherein Y^2 is a substituted silyl group; X^2 is one selected from the group consisting of a halogen atom, a thioalkyl group having a carbon number of 1-20, cyano group and trifluoromethylsulfonyl group) to form a silylated diamine compound represented by the following formula (VIII);



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R^3 is an alkylene or arylene group having a carbon number of 1-

12 provided that it may include a hetero atom provided that it has does not have an active proton; Y² is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure);

(ii) the silylated diamine compound is added with the an organic alkali metal compound or the organic alkaline earth metal compound to form the polymerization initiator represented by the following formula (V);

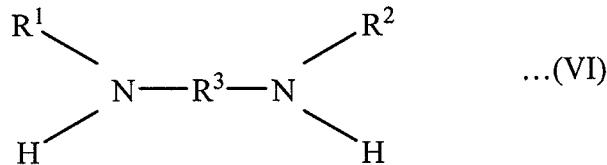


wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R³ is an alkylene or aryleno group having a carbon number of 1-12 provided that it may include a hetero atom provided that it has does not have an active proton; Y² is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure; M¹ is an alkali metal, an alkaline earth metal salt or an alkaline earth metal alkyl group), and

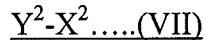
(iii) the polymerization initiator is used to polymerize a conjugated diene compound or polymerize a conjugated diene compound and aromatic vinyl compound.

18. (original) A modified conjugated diene polymer obtained by using a polymerization initiator solution as claimed in claim 14 and polymerizing a conjugated diene compound or a conjugated diene compound and an aromatic vinyl compound.

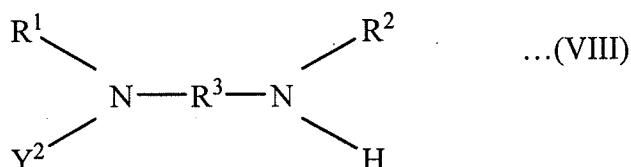
19. (currently amended): A method of producing a modified conjugated diene polymer, characterized in that (i) ~~the~~ diamine compound ~~of~~ represented by the following formula (VI):



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a hydrogen atom; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it does not have an active proton; a part of R^1 , R^2 and R^3 may be bonded to each other to form a cyclic structure) is added with a ~~the~~ silyl compound represented by ~~of~~ the following formula (VII):



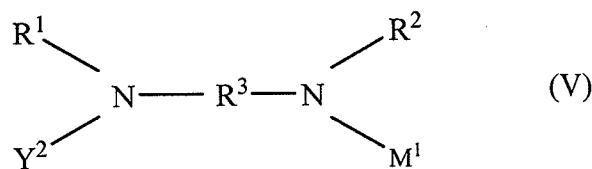
(wherein Y^2 is a substituted silyl group; X^2 is one selected from the group consisting of a halogen atom, a thioalkyl group having a carbon number of 1-20, cyano group and trifluoromethylsulfonyl group) to form a silylated diamine compound ~~of~~ represented by the following formula (VIII);



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it has does not have an active proton; Y^2

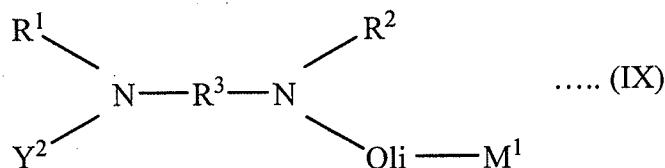
is a substituted silyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure);

(ii) the silylated diamine compound is added with the an organic alkali metal compound or the organic alkaline earth metal compound to form the polymerization initiator of the formula (V):



wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it has does not have an active proton; Y^2 is a substituted silyl group; a part of R^1 , R^2 , R^3 and Y^2 may be bonded to each other to form a cyclic structure; M^1 is an alkali metal, an alkaline earth metal salt or an alkaline earth metal alkyl group);

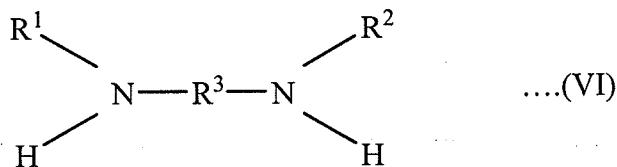
(iii) the polymerization initiator is added to a solution containing a conjugated diene compound to produce a low molecular weight polymer represented by the following formula (IX):



(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom unlessprovided that it has does not have an active proton; Y² is a substituted silyl group M¹ is an alkali metal, or an alkaline earth metal salt or an alkaline earth metal alkyl group; a part of R¹, R², R³ and Y² may be bonded to each other to form a cyclic structure; Oli is an oligomer or polymer portion formed by polymerizing 3-300 conjugated diene compounds); and

(iv) the low molecular weight polymer is added to a solution containing a conjugated diene compound or a solution containing a conjugated diene compound and an aromatic vinyl compound.

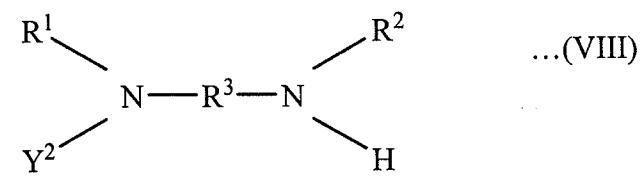
20. (currently amended): A method of producing a modified conjugated diene polymer, characterized in that (i) the diamine compound represented by of the following formula (VI):



(wherein R¹ and R² are independently an alkyl or aryl group having a carbon number of 1-20 or a hydrogen atom; R³ is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hereto atom provided that it does not have an active proton; a part of R¹, R² and R³ may be bonded to each other to form a cyclic structure) is added with a the silyl compound represented by the following formula (VII):

$$Y^2 - X^2 \dots \dots \text{(VII)}$$

(wherein Y^2 is a substituted silyl group; X^2 is one selected from the group consisting of a halogen atom, a thioalkyl group having a carbon number of 1-20, cyano group and trifluoromethylsulfonyl group) to form a silylated diamine compound represented by the following formula (VIII):



(wherein R^1 and R^2 are independently an alkyl or aryl group having a carbon number of 1-20 or a substituted silyl group; R^3 is an alkylene or arylene group having a carbon number of 1-12 provided that it may include a hetero atom provided that it has does not have an active proton; Y^2 is a substituted silyl group; a part of R^1 , R^2 , R^3 and Y^2 may be bonded to each other to form a cyclic structure);

- (ii) the silylated diamine compound is added to a solution containing a conjugated diene compound or a solution containing a conjugated diene compound and an aromatic vinyl compound; and
- (iii) the said-solution is further added with an organic alkali metal compound or an organic alkaline earth metal compound.

21. (previously presented): A rubber composition characterized as including a modified conjugated diene polymer as claimed in claim 1 as a rubber component.

22. (original) A rubber composition according to claim 21, wherein a content of the modified conjugated diene polymer is not less than 10% by mass in the rubber component.

23. (original) A rubber composition according to claim 21, which is sulfur-crosslinking.

24. (original) A rubber composition according to claim 21, which is compounded with 10-100 parts by mass in total of carbon black and/or an inorganic filler per 100 parts by mass of the rubber component.

25. (original) A rubber composition according to claim 24, wherein 10-100 parts by mass of silica as the inorganic filler is compounded per 100 parts by mass of the rubber component.

26. (previously presented): A modified conjugated diene polymer according to Claim 7, characterized by the further modification of a modified conjugated diene polymer wherein Y¹ in the formula (I) is a hydrogen atom with at least one of a compound having an isocyanate group and a condensate thereof.